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WAGES AND PRICES IN RELATION TO INTER-
NATIONAL TRADE.

THE main thesis of this paper is that, in considering the working of international trade, attention should be paid more to the range of money incomes, and less to the range of prices, and that, in gauging the advantages which a country secures from international trade, we should look primarily to the range and the variations of money incomes.

It is usually set forth that the country where prices are highest gains most from international trade, and the country where prices are lowest gains least. The range of prices obviously enough is not *per se* of consequence. High prices simply mean the use of more counters in exchange. But in buying imported commodities those whose domestic transactions are carried on with many counters have an advantage. Foreign goods are not so high in price, and are procured more easily. Conversely,

countries with low prices are ill off as regards imported goods, which are bought on hard terms by people whose scale of money prices is low.

This statement of the case would be open to no exception if the words "money incomes" were used throughout when stating the situation of the people of a given country. It is high money incomes that are of consequence in international trade, not high prices. In fact, a country may have, not high prices, but low prices, and still be in an advantageous position as regards international trade. High money incomes do not necessarily or commonly mean high prices. It is by a consideration of the relation between money incomes and prices, of the possibilities of divergence or parallelism between them, that some contribution may perhaps be made toward better understanding the phenomena.

Let us consider, for this purpose, a country in which wages and other money incomes are high. The United States serves our purpose. It has a high range of money incomes. It is commonly thought to have also high prices. Let us compare its situation with that of the European countries with which it trades, and ascertain wherein it gains, and how far its gains are connected with the prices of goods and the money rates of wages and other incomes. For the sake of simplicity, in speaking of the United States and of other similar countries, I shall use indifferently the terms "money wages" and "money incomes," leaving it to be understood that, with due allowance for causes of possible difference, not wages only, but other money incomes as well—rents, profits, interest, the earnings of independent farmers or artisans—tend to be correspondingly high.

We may begin by recalling some of the familiar principles of international trade. Under a state of freedom, goods that are imported and exported will sell at approximately

the same prices the world over. There will of course be differences from cost of transportation. Imported goods will sell at prices higher than their prices in the exporting countries by the amount of cost of carriage. Sometimes a commodity that newly enters into foreign trade—one that a shrewd merchant discovers to be cheap in one country and salable in another—will sell in the importing country at a large advance; and doubtless the action of competition in levelling profits and reducing such differences of prices to the “normal” point is not so quick and thorough as the economists are disposed to believe. But, on the whole, we may reason on the assumption that, under conditions of freedom, those commodities that enter into international trade have a common price the world over. The extraordinary cheapening of transportation during the last half-century, the easy transmission of news, the perfected organization of markets and exchanges, contribute to make this assumption a safe one for all the great staples. Customs duties, of course, are an important cause of differences in price. Of these something more will be said presently. But the fundamental principles can be best elucidated by tracing their operation under free trade.

Every country will export those things which are cheap in its borders,—whose prices are so low that they can be shipped to foreign countries and still sold at the advance needed to cover cost of carriage. And those things will usually be cheap which are produced with a comparatively small amount of labor,—those in which the efficiency of labor is great. A country with high money wages, like the United States, can yet put goods on the market (whether the domestic market or the foreign) at low prices if its labor is productive. Such is the familiar situation as to our great agricultural staples. The money incomes of those who grow wheat in the United States—whether the earnings of the independent farmers or the wages of

the laborers whom they hire—are larger than the incomes and wages of wheat-growers in most other countries. But the wheat can none the less be sold at a low price in the United States, and can be exported from the United States, because our labor is efficient in producing it. Why the labor is efficient is no part of the present inquiry. One cause clearly is the abundance of fertile land; a cause no less important is the wide-spread intelligent use of good agricultural machines. These very agricultural machines—to mention another article—are largely exported from the United States, tho the wages of the workmen who fashion them are high; because the methods of making them have been highly perfected, and the labor of the workmen is correspondingly efficient. To turn to another case, the earnings of the negroes who grow cotton in our Southern States, low as they may be when measured by ordinary American standards, are higher than those of the fellaheen in Egypt or the ryot in India. Yet American cotton can be sold as cheap as that of Egypt or India. The soil and climate make the Southern negro's labor effective, and doubtless in some degree a better organization and direction of his labor contribute also to make it effective.

All this is but a restatement of the principle of comparative costs,—that a country will export those things in which it has a comparative advantage. The exposition of that principle would be much simpler and more effective if it were made clear (the common form of statement fails to make it so) that those things in which a country has a “comparative advantage” are those which are likely to be low in price. International trade, like all trade, though fundamentally a matter of barter, is proximately a matter of price. A country sells abroad those things which it can produce at low prices at home. Ordinarily, those things are produced at low prices at home in which its labor is efficient.

Let us proceed to the next stage in the analysis: what will be the range of prices for those commodities which do not enter into the sphere of international trade,—those which are not exported or imported, but are bought and sold solely within the country? The quantity of such commodities is very great, and in all countries probably much exceeds that of commodities having a world range of prices. Many things are too bulky to be transported over any considerable distance,—as stone, bricks, timber. Many are perishable, as milk, butter, eggs, fruits, vegetables. No doubt modern improvements in the transportation of bulky goods and in the preservation of those that are perishable tend to enlarge the sphere of foreign trade. But such things are still sold mainly in their own region and at the prices of their own region. House-room and shelter—a most important article of consumption and purchase—cannot be transported at all, and so may vary widely in price in different countries. Some of the articles used in building houses—boards and laths, doors and windows, locks and hinges—may, indeed, be sent to distant regions. But even these are much affected by the customs and fashions of the several countries, and are usually made and sold on the spot or near it. A multitude of articles which might conceivably be brought from foreign countries are, in fact, made chiefly at home, because of the persistent sway of habit and tradition. Such are clothing and boots, tools and machines, wagons and harness. The reader's imagination will easily enlarge the list. The prices of all these things are determined under domestic conditions. They do not enter into international trade, and have no world level of prices.

Most persons would say that the prices of such commodities—it will be convenient to speak of them as domestic commodities—will be high in countries where money incomes are high and low where money incomes are low.

But this by no means follows. The range of domestic prices in a country, as compared with the range of prices of the same things in other countries, depends on the efficiency of labor in producing those commodities that do not enter into international trade.

Looking at the United States as our example, we find some things higher in price than in European countries, some things lower. We know, of course, that the exported articles—wheat, corn, flour, meats, cotton—are as cheap, even somewhat cheaper. But how about domestic commodities? Some are dearer, some are cheaper. Comparison is often difficult, because the qualities of things vary; but every-day observation suffices to establish significant differences. Wheat and flour are cheaper, yet bread from the bake-shop is dearer. Most fruits are as cheap or cheaper in the United States, especially when they have been transported some distance. In the immediate region of fruit-growing, fruits are often cheaper in Europe. Eggs are dearer in the United States. Milk and butter are usually dearer also. Bituminous coal is, in most parts of the United States, as cheap or cheaper. Anthracite coal is dear; but comparison with a corresponding article in European countries is not feasible. The simpler kinds of cotton clothing are cheaper. Boots and shoes are as cheap, probably cheaper. Woollen clothing is dearer. Here the effect of the duties on wool must be reckoned with; but ready-made woollen clothing is not so comparatively high in price as that made to order. Household furniture is cheaper; hardware and kitchen utensils are probably also cheaper when due allowance is made for quality. All things that involve personal service—cab fares, hotel charges, servants' wages—are markedly higher in price.

An interesting case, and one that serves to bring out both the difficulties of comparison and the working of the underlying forces, is that of house-room. The amount

that is actually paid out for house rent is, scale for scale in the social stratification, higher in the United States. But in most cases more is got for the money. The space is ampler, the lighting better, the appurtenances more convenient. Persons of the well-to-do class who spend a season in Europe will commonly pay less for house rent than they would expect to pay in the United States, but they are commonly content with less agreeable and convenient accommodations. A significant difference is observable between houses made chiefly of wood and houses built of brick and stone. Masonry work is dearer in the United States: wood work is as cheap or cheaper. Houses of brick or stone cost more to build than in Europe. If built of wood, they cost less. The explanation is that machinery can be applied to manipulating wood more easily than to brick or stone. Given the same efficiency of labor, the same output per day per man, and it is evident that, if you pay higher wages, you must charge higher prices. Such is the case, in the main, with brick and masonry work in the United States as compared with Europe. Brickmaking and bricklaying, stone-cutting and masonry, are done chiefly by manual and artisan labor, tho in brickmaking and in stone-cutting there is probably, in the United States, somewhat greater use of power and machinery. Wages being higher, and the efficiency of labor no greater, prices must be higher. Wood working, on the other hand, from the rough-sawn timber to the last moulding on the door or windows, is done in the United States with a great use of machinery; and, what is most significant, with a *greater* use of machinery and labor-saving devices than in any other country. Labor is thus made more efficient, and, though more highly paid, its product is not necessarily sold at a higher price. Given a sufficient advantage in efficiency, and the product will even be cheaper. If the work on your wooden house is all

done on the spot by carpenters, it will be dearer in the United States; but, if the carpenters simply put together in short order the machine-made pieces from the saw-mill and factory, it will be cheaper in the United States. The latter is the way in which the great majority of houses are built in the United States for persons of small means or moderate means; and such houses are as cheap as in Europe or cheaper, and the house rent for them is, quality and convenience considered, as low or lower.

This explanation of the range of house rents applies, strictly speaking, only to the selling price, or capital value, of the building and improvements. The rental is compounded of a return on this investment and of premium for the advantage of the site, namely, economic rent proper. The first of these items, interest on capital, is affected by causes very different from those that govern prices and wages. The rate of interest may be high where money wages are low, and low where wages are high. In fact, however, the variations in the rate of interest among civilized countries are not so great that we have here an important qualification of our conclusion as to the causes acting on the price of house-room. Differences in the cost of building will affect this part of the rental much more than differences in the rate of interest. As to economic rent, the case is simpler: this return may be expected to vary *pari passu* with money incomes. To apply the familiar theorem, rent is here the result of price, and not among the causes of price. Where the general range of wages and of income is high, the amount that will be paid for an advantageous or indispensable site will be correspondingly high. Hence we are prepared to learn that the rents of tenements in New York City are high. The investment in them is heavy. Their brick work is done by highly paid artisans, with little use of labor-saving machinery. A crowded population, with a high range of money incomes, causes

economic rent to rise to portentous heights. On the other hand, in smaller cities and in the suburbs of most larger cities, modest wooden houses for artisans are cheap. Economic rent enters little, and the cost of building is comparatively low.

Similar reasoning can be applied to the rental of business structures. The steel-frame office building in the United States probably costs less per unit of available space than similar buildings in Europe. The less ambitious brick or stone business structure probably costs more. The total rental is a compound of interest and economic rent, the latter exercising a preponderant influence on those sites where there is demand for the enormous amount of floor space provided in the huge office building.

Ordinary pick-and-shovel work costs more in the United States: sewer-digging, street-making, the grading of a railway. Wages are higher, and, man for man, no more is accomplished, or little more. It is, indeed, often said that the efficiency of such labor is greater in the countries of higher wages: the laborer, getting more food, can do more work. There is doubtless truth in this, in comparing the laborers of starvation countries, like British India, with those of countries where life is less cheap. But I have always been doubtful as to the sweeping application of this sort of reasoning. The rice-fed Chinaman or Japanese seems to do as much in a day as the beefy Englishman; the frugal Italian as much as the extravagant Irishman. Hence we may expect the product of ordinary manual labor to cost more (in money) in a country like the United States. No doubt much work that seems to be solely of this kind is affected by the degree and extent to which machinery and labor-saving devices are used. The familiar apparatus of sewer-construction in the United States is vastly superior to anything of the sort in common use on the continent of Europe. The same is true of

the railway contractor's outfit. So far as the American engineer and contractor can secure by such means greater efficiency of labor, the high money wages do not bring high expenses and high prices.

Railway freight rates are, on the whole, lower in the United States.¹ That they should be lower or as low, notwithstanding the higher wages of all railway employees, is clear proof that the efficiency of railway operations in the United States is greater than in Europe. The lower rates for freight and the greater extension of facilities for long distance traffic go far to explain the comparatively low prices of many commodities,—fruits, coal, even bread-stuffs and meats. One great cause of the general efficiency of labor in the United States and of the wide diffusion of material prosperity has been the extraordinary development of the geographical division of labor; and for this the widely ramifying railway net, and the extent and cheapness of railway service, have been indispensable. Street railway fares, to instance another curious case, are as low or lower in the United States. Even at the lower fares, they commonly yield large profits. The efficiency of labor must be very much greater.

Retail prices—I mean prices at retail compared to prices at wholesale—present a mixed case. If the operations of the retail dealers in the United States are conducted in the same way as in Europe, the advance of retail prices

¹ In Messrs. Hoff and Schwabach's *Nordamerikanische Eisenbahnen* (Berlin, 1906, chap. viii.) a careful comparison is made between the general range of railway rates in Prussia and in the United States. The conclusion is that, when due allowance is made for the different position of express and post-office business, for passenger fares, for capital investment, rates are in reality a trifle ($\frac{1}{4}$ pfennig) lower in Prussia. The mode of calculation made by these writers seems to me open to criticism, more especially in regard to the allowance for greater capital investment in Prussia. But, even admitting the accuracy of the calculation, the result is that the money rates charged for railway service are virtually the same in the two countries; yet the money wages of the workmen are twice as high in the United States.

So far as passenger rates are concerned, comparison is not easy, since the bulk of the passengers in Europe travel third class, with accommodations less convenient than those of the average American passenger; *i.e.*, with a different quality of service.

over wholesale must be greater. Otherwise the earnings of the retail dealer will not be on the same liberal scale as the wages and earnings of the rest of the community. But if the retail dealer's work is done, not in the same way, but in a more effective way than in Europe, he can reap sufficiently high gains with no larger margin of profit. Both situations seem to exist. The large department store in the United States is probably conducted with greater efficiency and with no greater advance of retail over wholesale prices than in European countries, tho the recent rapid growth of this sort of shop-keeping in Europe makes the difference less certain than it would have been ten or twenty years ago. On the other hand, a great deal of retailing—probably the greater part of the sum total of this sort of work—is still done on a small or modest scale. The grocer, butcher, apothecary, must usually be near his customer. This means that the operations are scattered and are conducted on no large scale. In such case the advance of retail prices over wholesale—the retailer's "profit"—is greater in the United States. Hence it may happen that an article which is exported from the United States to Europe, and whose wholesale price is necessarily lower in the United States, may yet be dearer here to the consumer. Expense of transporting the great staples across the ocean has been reduced to a very narrow margin, and the slight difference caused by this in wholesale prices may be more than balanced by the greater advance of retailer's profits in the country of higher money incomes. Butcher's meat may cost the consumer more in the United States, even though dressed beef be sent by the shipload across the Atlantic.¹

¹ It may be that another cause enters to explain the fact that the retail prices of meat products exported from the United States are sometimes higher here than in the countries to which they go,—a phenomenon which has doubtless puzzled many observers. The Eastern seaboard regions, and especially New England, are supplied with meat chiefly by the great packing concerns whose headquarters are

Persons of the well-to-do classes always find the expenses of living incomparably higher in the United States than in Europe; and, to their mind, there is no question that prices here are higher, and higher in proportion to the higher range of money incomes. The explanation is partly that much of their expenditure is for personal services; partly that another large slice of it is for those articles, imported and other, which are really high in price; partly that a higher scale of comfort and luxury has been established by prevalent prosperity. A good part of the income of the well-to-do is spent for services,—for domestics, for such things as cabs and hotels. Where the range of wages is high, these things are expensive. Wages for domestic service are particularly high, because the spirit of democracy makes the occupation distasteful. Americans who resort to Europe, on the other hand, always find living cheap; for domestic service and all that hangs thereby can be obtained at low prices. Again, the expenditure of prosperous Americans at home is directed in large degree to the less hackneyed and less common articles,—to the hand-made things rather than the machine-made things. The hand-made things are dear in a country where money wages are high. Clothing made to order is dear, but ready-made clothing is by no means dear in the same degree. Factory-made furniture is cheap: custom-made furniture is extremely dear. Cab fares are high: street railway fares are low. Imported articles of course would be no higher in price than abroad, or very little higher, were they admitted duty free. Being subjected to

in Chicago. These have a more or less compact pooling or price-fixing arrangement, and very likely charge the Eastern consumer something in the nature of a monopoly price. When they export, say to England, they cannot exercise such a monopoly power, and their prices, even at wholesale, may be lower. Whether the facts are in accord with this explanation, and whether we have here another reason for the peculiar difference of English and American prices of meat, I am unable to say. The subject is an appropriate one for investigation by some of our public bureaus of statistics.

heavy duties, they also are expensive. It is probable that the most effective part of our protective system is now directed against the articles made in larger proportion by hand, with the tool, and in less proportion by power, with machinery. These are the things most likely to be imported into the United States, and most enhanced in price by the protective duties. These are often, though by no means always, the commodities bought by the well-to-do; and thus there is ground for saying that the social effects of the protective system here are very much less objectionable than in countries that levy effective duties on the staples of life.

In sum, it can be said that the United States, though a country of high wages, is not a country of high prices for the great mass of the community. It is so in large degree for the rich and well-to-do. The artisans and workingmen and farmers have, indeed, a high scale of living, for they have plenty to spend; but the domestic articles they buy are, on the whole, not dear. They are not dear, because the efficiency of labor in making them is, on the whole, no less than the efficiency of labor in making the exported articles. Imported articles which are duty free, like tea and coffee, are as cheap (barring cost of carriage) as in foreign countries; and here also the American gets the full benefit of his higher money wages. So far as the protected articles are concerned, his advantage is simply thrown away.

What has been said of the United States, the typical country of high money wages, applies, *mutatis mutandis*, to countries of low wages. Domestic prices in a country of low money wages may or may not be low. Such a country is usually—though not necessarily—one with an all-around inefficiency of labor. Those articles as to which its labor is least inefficient, and which are transportable or for other reasons salable abroad, will be exported. Though

they may be turned out by inefficient labor, they can yet be sold at the international price because the expenses of production—money wages—are low. Domestic commodities—namely, such as are not exported or imported—may be comparatively low or high in price, according as labor in producing them is effective or ineffective. The wages of servants and other like expenses of the well-to-do are sure to be low.

Our next inquiry is, What causes high money wages? The answer is not hard to find. Those countries have high money wages whose labor is efficient in producing exported commodities, and whose exported commodities command a good price in the world's markets. The general range of money incomes depends fundamentally on the conditions of international trade, and on those conditions only. The range of domestic prices then follows: it is high so far as the efficiency of labor in domestic commodities is small, low so far as the efficiency of labor in domestic commodities is great.

The situation is simplest in the case—difficult to find in the real world, but instructive for illustration of the principle—of a country having a monopoly of a given article of export or set of exported articles. By monopoly, of course, is meant not that the producers within the country fail to compete effectively among themselves, but that the producers of no other country compete with them. The price of such exported articles would depend, in the manner with which the reader may be supposed familiar, on the equation of international demand. The more the consumers in other countries care for them, the higher will their prices be pushed. The less the labor with which these articles are produced at home, the higher will be the money wages resulting from these high prices. The higher money wages in the exporting industries will

set the standard for money wages in the country at large; and the general high wages may or may not be accompanied, as already explained, by high domestic prices.

Where a country exports in competition with other countries,—the well-nigh universal case,—the same forces are at work. The prices at which the exports are sold depend on the world demand for the commodity. In that world demand, or, to speak more carefully, interplay of demand, the extent to which the consumers in the several countries care for the articles imported into them determines which countries shall sell their exports on advantageous terms. Those countries whose exports are in most urgent demand will have the greatest possibility of high money incomes. Whether they will have high incomes in fact, depends on the labor cost of their exports. The wheat which is exported both by the United States and by Russia sells at the same price; but that price means large money returns in the country of machinery, efficient labor, and cheap internal transportation, and low money returns in the country which lacks these advantages. In the language of Mill,¹ “What a country’s imports cost to her is a function of two variables: the quantity of her own commodities which she gives for them, and the cost of those commodities. Of these, the last alone depends on the efficiency of her labour: the first depends on the law of international values; that is, on the intensity and extensibility of the foreign demand for her commodities, compared with her demand for foreign commodities.”

Where a country produces and exports specie,—gold, let us say,—the case may seem to be different; yet a little consideration will show that the forces at work are the same as in countries producing other articles of export. A gold mining country may or may not have a high level of domestic prices. Gold is indeed a commodity which always

¹ Mill, *Principles*, Book III., chap. xviii., § 9.

is readily taken by foreign countries. The demand for it is sometimes said to be limitless; more carefully stated, it is constant. All the gold produced will be taken, and will be distributed the world over among virtually all the trading countries, at rates of payment which will be very slightly modified by any annual or decennial increase in the quantity sent out from the mining countries. If now the gold is produced, and produced freely, with little labor,—if it is cheap in that essential sense,—the mining country will have high money incomes. Such was the case in California and Australia during the first days of the gold discoveries. Prices of all things were high in those days; for in commodities at large labor was by no means efficient. In a country where gold, though mined, is not produced under advantageous conditions,—where the mines are poor or mining methods at a low stage,—money wages will not be high; and the gold will not be mined at all unless it yields as large money incomes as other possible articles of export.

In the case of a gold mining country we may note a qualification which indeed should be borne in mind for all countries and for all commodities: it is to be assumed that the exporting industry does not partake of the character of a monopoly within the country. In the placer mining days of California and Australia any laborer with a pan and a stock of provisions could join in the hunt for gold, and high money wages were a matter of course. When more elaborate mining set in, high wages still continued, so long as the mining capitalists competed among each other for laborers. But if some of the mines were highly productive and others much less so, the efficiency of labor at the margin of mining would fix the range of money wages. There might be advantageous production and heavy exportation of specie, without a high range of wages, if the exports came predominantly from the better

mines. And if the mines were all owned and operated by one person or organization, the greatest richness and productiveness need not result in high wages. All the treasures of Potosi, however little labor they cost the wretched native, never could bring him high returns, even in money. And similarly, if all the exporting industries of the United States were under such control as are the production and refining of petroleum, however great the productiveness of labor and however strong the foreign demand for the articles, the general range of money wages would not necessarily be high, and certainly would be less high than under conditions of unrestrained competition.¹

There is an important sense in which it is true that a country whose position in international trade is advantageous has not only high money incomes, but high prices as well. In the preceding, domestic prices have been said to be high or low, if the prices of given commodities are higher or lower than the prices of the same commodities in other countries. Thus the price of a wagon may be spoken of as high or low in the United States if it is higher or lower than the price of the same sort of wagon in Europe.

¹ The foundation for all such discussion as this was laid by Ricardo, whose genius nowhere shone so brilliantly as in his illumination of the theory of foreign trade. But Ricardo, so far as I know, referred only to varying general prices in different countries. Senior seems first to have laid it down explicitly that the range of money incomes depends on the conditions of foreign trade (*Lectures on the Cost of Obtaining Money*, 1830, pp. 13-16). Mill spoke sometimes of high prices, sometimes of high incomes, as the result of favorable conditions of foreign trade, and did not pause in his exposition to consider the relation of money incomes and domestic prices. Cairnes followed Senior, though using different language, when he said that a country was interested in having "cheap gold"; by which he clearly meant, though he did not say it in so many words, high money incomes,—i.e., much gold for little labor. Cairnes also noted that "cheap gold" did not necessarily mean high prices of domestic commodities. See his *Leading Principles*, Part III. chap. v., § 1. In Bastable's *Theory of International Trade*, 4th edition, p. 71, there is a brief paragraph indicating that this able thinker had reflected on the complex relations of money incomes and prices. Professor Edgeworth's articles on International Trade in the *Economic Journal*, vol. iv., take up quite different aspects of the theory. I have found nothing in the writings of French or German economists to show that such topics had engaged their attention at all.

Similarly, railway and street railway fares and house rents may be reckoned low if they cost less money than similar things in Europe. But we may compare wagons and fares and rents, not with European rates, but with the prices of the same things at a different time and under different conditions in the United States. So considered, it is obvious that they are likely to vary with wages and money incomes. They will probably rise as money wages rise, and fall as money wages fall.

If we suppose, for example, that the conditions of international demand change to the advantage of a given country, that its exports sell on better terms, and that money incomes in the exporting industries rise, we may expect that the same rise in money incomes will spread to other industries. This will necessitate in those other industries a rise in prices. In the exporting industries the higher wages will be the result of higher prices; but in other industries higher prices will be as much a result as a cause of higher wages. The process of adjustment and enhancement will probably be slow and uneven, and will take time. In an immobile country, where custom and tradition have a strong hold on prices and wages, it may take a decade or a generation. Even in a mobile modern country, it will take years. But domestic prices will be higher in the end than they would otherwise have been. This, no doubt, is the sense which the older economists really had in mind when they set forth that a country having favorable terms of international trade would possess high prices. But their mode of stating the case might be easily understood to mean that domestic prices in such a country were higher than prices of the same things in other countries, which is a different proposition, and, as we have seen, a doubtful one.

Further, it is not certain that under the conditions thus assumed domestic prices will rise at all. *Pari passu* with

the rise of money wages due to the country's better position in international trade, there may be improvements in the arts or the opening of new resources, which will reduce domestic prices or prevent them from rising. Given this force in operation on domestic prices at the same time with a turn in international trade causing money incomes to rise, and the parallel movement of wages and prices will be broken. Such was the general trend—rising wages and falling prices—through the last thirty years of the nineteenth century; it may prove to be the trend in the present century.

The recent experience of the United States serves to illustrate the principle just stated, precisely as the general range of its domestic prices has served to illustrate the relation between international trade and domestic prices. The striking phenomenon in the international trade of the United States during the last thirty years has been the insistent demand of foreign countries for our exports; and at no time has this been more striking than during the six or eight years just past. The main items in our exports are still the great agricultural staples: cotton, wheat and flour, other grains, meat and meat products. These are necessities, or articles of enjoyment so habitually in use that they are very reluctantly dispensed with. The increase of population and the slow steady rise in the standard of comfort the world over, and particularly in European countries, causes an unrelaxing growth in the demand for them,—a demand checkered indeed by the accidents of seasons and crops, and by the oscillations of industrial activity, but on the whole advancing without relaxation. So far as our imports are concerned, some are in similar strong demand on our part: coffee, sugar, tea, are insistently called for. On the other hand, the imports of manufactures are mainly in a different case. They are articles easily dispensed with, more quickly dropped

when their prices are high or times are hard, less easily stimulated to further use when their prices are lowered. All this brings it about that our exports are more easily and certainly disposed of abroad than imports are disposed of here. This means that specie tends, on the whole, to flow to this country (or, what comes to the same thing, the domestic output of specie retained within its borders), and that money wages and domestic prices tend to be high. That is, money wages tend to be high as compared with foreign countries, and domestic prices tend to be high as compared with what they otherwise would have been.

The force which has brought about these tendencies has not acted with uniform pressure. There has been a succession of pushes. Recurrently, periods have come when large crops of cereals in the United States have coincided with short crops in Europe or when the American cotton crop has declined or failed to grow. Then the insistent European demand has made itself felt with sudden force. Exports have swollen and have exceeded the imports; specie has flowed in; a period of excitement, rising prices and speculation, has begun. Such has been the nature of the very latest upward movement. The revival of activity after the depression of 1893-97 was due to the slowly gathering demand for the staple exports; and the maintenance of activity has been due fundamentally to the same increasing demand.¹ Hence imports of specie, retention of the domestic specie product, rising wages, rising prices. The rise in money incomes has been well-nigh universal. The rise in domestic prices has been less so, because offset here and there by improvements in the arts, and by increased efficiency in producing one commo-

¹ See the excellent analysis of the recent economic history of the United States by Mr. A. D. Noyes, in this *Journal*, vol. xix., February, 1905. Compare also the article by Professor A. P. Andrew in the last issue of this *Journal*, May, 1906.

dity or another. All the demands of trade unions and all the scales of higher wages have been immensely promoted by these conditions, if, indeed, they have not been mainly caused by them. Labor unions, strikes, trade agreements, have been the mechanism by which the fundamental cause has worked out its effect. That mechanism, no doubt, has important independent effects of its own; but it is not to be supposed the sole force or the strongest force in operation.

The favorable position which the United States thus has in international trade has reacted on the effects of the protective system. That system has checked the demand for imports, and made it more difficult for foreign countries to provide the wherewithal for discharging their obligations on account of the exports which they want so insistently. The result has been that money incomes in the United States, which would be high in any case, have been pushed even higher; and thus domestic prices also have been held higher. On the other hand, the prices of imported goods have been depressed,—either actually lowered or kept lower than they would have been,—and the people of the United States have gained as consumers of imported goods. So far as they have been successful in stimulating the domestic production of goods that would otherwise have been imported,—that is, so far as the protective system has achieved its avowed effect,—this gain has been simply thrown away, and a loss has been substituted for it. But, so far as importation has continued, the gain has been really secured. Many imports come in over the tariff barrier. These of course are raised in price over the foreign price by the extent of the duties; but the treasury gains what the consumers pay, and other taxes are presumably dispensed with, and the foreign price itself is lower than it would otherwise have been. As to duty-free imports, there is obviously a clear gain. They are

lower in price, and the money incomes for buying them are higher. Whether the loss in buying the home-made protected commodities outweighs the gain in buying the commodities that continue to be imported is quite impossible of calculation. The ardent protectionist might find in this sort of reasoning a tenable ground for supporting his policy in a country situated as the United States has been; but few protectionists follow the strict logic of economics far enough to perceive the advantage which they might thus proclaim.

A last word may be said as to the relation of all this reasoning to the modern development of the theory of value, and more especially to the question how far value depends at bottom on utility, how far on sacrifice. The Ricardian assumption—tacitly followed in the preceding pages—was that in domestic exchanges values and prices depended on sacrifice, on labor. Those commodities, it was supposed, whose labor cost was low would be low in price, and so would tend to be exported. But do value and price depend on labor cost? Are there not, to use Cairnes's convenient phrase, non-competing groups? And is not utility the permanent regulator of value? If so, what of the reasoning which assumes that efficiency and labor cost determine which commodities shall be cheap in money, and so shall be exported from a country?

Some allowance for this turn in the reasoning was made by the older economists. Exceptionally low wages in any particular industry, it was pointed out, had the same effect in international trade as low labor cost. Either served to give a comparative advantage, and to cause a commodity to take its place in the list of exports. Slave-grown articles were commonly used to illustrate this exception. But an exception it was still thought to be. In the main, labor cost determined value within a country,

and so determined what goods should be exported. But, if there be no free movement of labor from group to group, and no correlation of capitalists' expenses to labor cost, will not the whole theory of international trade need to be overhauled?

The answer to this question is twofold. In the first place, there probably is more competition among laborers than the bare assumption of non-competing groups admits. Briefly to state my own view on this crucial matter, I do not believe that competition among workers is so free as to bring about an equalization of reward, and to adjust wages to sacrifice. There are effective obstacles to free movement. There are, in so far, non-competing groups; and value is proximately determined by utility, not sacrifice. But the barriers between groups are not impassable. The higher the differences in reward, the greater the number who get over the barriers and increase the supply in the favorably situated groups. Hence labor cost, sacrifice, are always in the background, so to speak, and prevent the sway of utility over value from being unqualified. The greater the deviation of value from equivalence to sacrifice, the less is it likely to persist. In the long run, competition between workers exercises not a dominating, but a correcting influence.

However this may be, there is a second reason why the theory of international trade does not need on this score serious modification. Goods are rarely made, in civilized countries, by workers of one grade only. The day laborer does not make one thing, the mechanic another, the engineer a third. They join in the combined labor applied to all the various commodities. Now, if the relations of the different grades to each other are the same in different countries, and if the same combinations of labor are used for any one article, the conditions of competition between the countries are precisely the same as if within

each country labor cost alone determined value. If the earnings of engineers are twice as high as those of mechanics in all the countries, and the earnings of mechanics twice as high as those of day laborers, and if, moreover, the same combination of the labor of all three is used throughout in making the same commodity, then those things will be cheap which are produced in a given country with comparatively little labor, and those things will be dear which are produced with comparatively much. The former will tend to be exported, and the latter will tend to be imported.

It is not to be pretended that there is, among different countries, such absolute identity in the relations of the different grades of labor as has here been assumed, or in the way in which the grades are combined for the operations of production. Tho the phenomena of social stratification are, on the whole, similar in the civilized countries, new and old, there may be important differences. A particular group of workmen may be in higher demand in one country than in another. Their wages may be particularly high in the first country. If so, though their labor may be efficient, its product will be comparatively dear in price. On the other hand, a particular kind of labor may be so abundant as to be cheap in one country. Its labor may be paid for on a scale low as compared with the general scale in that country; and then the effect is precisely the same on international trade as if such labor were comparatively efficient.

I suspect that a situation of the kind last mentioned has appeared in the United States in the last twenty years,—a situation in which a particular kind of labor has been paid, if not at decreasing rates, yet at rates that have failed to advance *pari passu* with the general rise in money incomes. Broadly speaking, the pay of unskilled manual labor has relatively declined. Most money incomes have advanced in the United States during the last thirty years, and the

incomes of skilled mechanics have advanced very considerably. But the wages of ordinary day labor, and of such factory labor as is virtually unskilled, seem to have remained stationary, and sometimes seem even to have fallen. The explanation undoubtedly is that immigration on a huge scale has steadily maintained the supply of such labor. The pressure for employment on the part of the newly arrived has kept down the pay for the simple sort of work they can turn to.

The consequence is that industries using such labor in large degree are in a relatively better situation than they were before, and hold their own against foreign competition more easily than before. In general, it is to be expected in the United States that those industries which use highly skilled labor—namely, those which use machinery calling for skilled labor—will best hold their own; for it is here that American labor has proved to have a comparative advantage. But where unskilled labor is cheap, not responding readily to the general conditions which make wages high,—where it is relatively cheaper than in competing foreign countries,—there the disadvantage which the employer finds in using it *pro tanto* disappears. One of the striking changes in the economic development of the United States during the last generation has been the growth of manufactures that need such labor, the steady cheapening of their products, and their lessening dependence on support from the protective tariff. Such are the manufactures of pottery in its cheaper grades, of silk goods, of textiles in general. The cheapening of bituminous coal and of coke seems to be part of the same phenomenon. The boasted advance of manufacturing industries is thus due in some degree to a change, not entirely welcome, in social conditions. No doubt other causes also have contributed to it: the discovery and utilization of natural resources hitherto unknown or neglected,

improvements in methods and machinery more rapid than the improvements in foreign countries, and protective duties pushed up to the highest limit. But the comparative degradation of the lowest stratum in the social structure has been a contributing factor. Thus, to take an example, the silk manufacture has been stimulated to extraordinary growth by extremely high protective duties. But it has also found at its command a vast supply of cheap, unskilled labor, easily employed in many of its branches; and this circumstance has enabled it to take advantage of the protective system with ease and rapidity. What would happen if the protective wall were removed, and if this second source of advantage alone were at its disposal, who can say?

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